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REMARKS

Claims 1-3 and 5-21 are pending in this application. By this amendment, Applicant amends claims 1, 9 and 15 and cancels claim 4.

Claim 20 and 21 were rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. Particularly, the Examiner alleged that the claims are indefinite for failing to further limit the parent claim from which they depend. Applicant respectfully disagrees.

Claims 20 and 21 are clearly directed to product-by-process claim which makes reference to a preceding claim to define limitations. MPEP 2173.05(f) clearly sets forth that "a claim which makes reference to a preceding claim to define a limitation is an acceptable claim construction which should not necessarily be rejected as improper or confusing under 35 U.S.C. § 112, second paragraph. For example, claims which read: 'The product produced by the method of claim 1'..." Thus, Applicant respectfully submits that claims 20 and 21 are clearly definite and proper. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 1, 2, 4, 6-8 were rejected under 35 U.S.C. §102(e) as being anticipated by Kwon et al. (U.S. Patent No. 6,278,178). And claims 3, 5 and 9-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kwon et al. In view of Ogiwara et al. (U.S. Patent No. 4,764,232). Applicant respectfully traverses these rejections.

Claim 1 has been amended to recite:

"An electronic component comprising:

a member having first and second main surfaces disposed opposite to each other, and four side surfaces connecting the first and second main surfaces, at least one of the side surfaces being provided with a recess portion extending from the first main surface to the second main surface; and

a plurality of external terminal electrodes provided in the recess portion; wherein

a plurality of concavities are provided in the recess portion, the external terminal electrodes are arranged as to completely fill the concavities, and surfaces of the plurality of external terminal

electrodes have a common flat surface with a surface of the recess portion." (Emphasis added)

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Claim 9 has been amended to recite:

"A method of producing an electronic component comprising the steps of:

preparing a ceramic green molded product having a plurality of terminal conductors, the plurality of the terminal conductors extending in the thickness direction over at least a portion of the thickness thereof;

forming a via-hole having an elongated cross section along a line on which a plurality of the terminal conductors of the ceramic green molded product are arranged, the via-hole piercing the ceramic green molded product between first and second main surfaces thereof opposite to each other, wherein a portion of each of the plurality of the terminal conductors is exposed at the via-hole;

firing the ceramic green molded product to obtain a ceramic sintered product; and

splitting the ceramic sintered product along a splitting line passing through the via-hole, wherein the terminal conductors exposed on the inner wall of the via-hole are arranged in a recess portion formed by splitting the via-hole, such that the entire exposed portion of each of the plurality of terminal conductors defines a common flat surface with a surface of the recess portion, and the ceramic electronic component is divided." (Emphasis added)

In contrast to the present claimed invention, Kwon et al. teaches, in Figs. 14 and 15, external terminals 13a which are formed by coating only the peripheral surfaces of via holes 13 with a conductive film. Thus, Kwon et al. clearly fails to teach or suggest external terminals which completely fill the via holes (concavities), and certainly fails to teach or suggest "the external terminal electrodes are arranged so as to completely fill the concavities, and surfaces of the plurality of external terminal electrodes have a common flat surface with a surface of the recess portion" as recited in claim 1 of the present application.

Since the external terminals (terminal conductors) 13a of Kwon et al. are provided only on the peripheral surface of the via holes 13, and clearly do not completely fill the via holes, Kwon et al. certainly fails to teach or suggest the step of "splitting the ceramic sintered product along a splitting line passing through the via-hole, wherein the terminal conductors exposed on the inner wall of the via-hole are arranged in a recess portion formed by splitting the via-hole, such that the entire exposed portion of each of the plurality of terminal conductors defines a common flat

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surface with a surface of the recess portion" (emphasis added) as recited in claim 9 of the present claimed invention. In contrast, only a very small portion of the external terminals 13a of Kwon et al. defines a common flat surface with a surface of the recess portion, and the vast majority of the exposed portion of each of the external terminals 13a of Kwon et al. is spaced from the surface of the recess portion within the via holes 13, as clearly seen in Fig. 15 of Kwon et al.

Ogihara et al. is relied upon merely to teach external terminals which extend from a first main surface towards a second main surface but do not reach the second main surface. Ogihara et al. clearly fails to teach or suggest "the external terminal electrodes are arranged so as to completely fill the concavities, and surfaces of the plurality of external terminal electrodes have a common flat surface with a bottom surface of the recess portion" and the step of "splitting the ceramic sintered product along a splitting line passing through the via-hole, wherein the terminal conductors exposed on the inner wall of the via-hole are arranged in a recess portion formed by splitting the via-hole, such that **the entire exposed portion of each of the plurality of terminal conductors defines a common flat surface with a surface of the recess portion"** (emphasis added) as recited in the present claimed invention.

Thus, Applicant respectfully submits that Ogihara et al. fails to cure the deficiencies of Kwon et al. described above.

Accordingly, Applicant respectfully submits that Kwon et al. and Ogihara et al., applied individually or in combination, fail to teach or suggest the unique combination and arrangement of elements and method steps recited in claims 1 and 9 of the present application, respectively.

Claim 15 has been amended to recite:

"The method of producing an electronic component comprising the steps of:

preparing a ceramic green molded product having first and second main surfaces disposed opposite to each other;

forming a via-hole having an elongated cross section which pierces the ceramic green molded product between the first and second main surfaces;

firing the ceramic green molded product to obtain a ceramic

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sintered product;

forming a plurality of external terminal electrodes on the ceramic green molded product or the ceramic sintered product so as to be arranged on the inner wall of the via-hole after the step of forming the via hole; and

splitting the ceramic sintered molded product along a split line passing through the via-hole, wherein the plurality of the external electrodes formed on the inner wall of the via-hole are arranged in a recess portion formed by splitting the via-hole." (Emphasis added)

In contrast to the present claimed invention, Kwon et al. teaches a method of manufacturing an electronic component in which via holes 13 are formed in the substrate 11, a conductive material is coated on the peripheral surfaces of the of the via holes 13 to define external terminals 13a, and **after the external terminals have been formed**, a routing process is performed along an imaginary vertical center line of the via holes 13 to form elongated via holes in the substrate 11 (see Figs. 13-15 and col. 4, lines 39-62 of Kwon et al.). Thus, the step of forming the external terminals is performed **before** the step of forming the via hole having an elongated cross section, **NOT after** the step of forming the via hole having an elongated cross section. Therefore, Kwon et al. clearly fails to teach or suggest "forming a plurality of external terminal electrodes on the ceramic green molded product or the ceramic sintered product so as to be arranged on the inner wall of the via-hole **after the step of forming the via hole**" as recited in claim 15 of the present application.

Ogihara et al. is relied upon merely to teach external terminals which extend from a first main surface towards a second main surface but does not reach the second main surface. Ogihara et al. clearly fails to teach or suggest "forming a plurality of external terminal electrodes on the ceramic green molded product or the ceramic sintered product so as to be arranged on the inner wall of the via-hole **after the step of forming the via hole**" as recited in claim 15 of the present application.

Thus, Applicant respectfully submits that Ogihara et al. fails to cure the deficiencies of Kwon et al. described above.

Accordingly, Applicant respectfully submits that Kwon et al. and Ogihara et al., applied individually or in combination, fail to teach or suggest the unique combination

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and arrangement of method steps recited in claim 15 of the present application.

In view of the foregoing amendments and remarks, Applicant respectfully submits that claims 1, 9 and 15 are allowable. Claims 2, 3, 5-8, 10-14 and 16-21 depend upon claims 1, 9 and 15, and are therefore allowable for at least the reasons that claims 1, 9 and 15 are allowable.

In view of the foregoing Remarks, Applicant respectfully submits that this Application is in condition for allowance. Favorable consideration and prompt allowance are respectfully solicited.

To the extent necessary, Applicant petitions the Commissioner for a One-month extension of time, extending to March 6, 2003, the period for response to the Office Action dated November 6, 2002.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted, **FAX RECEIVED**

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